# Cambodia Agricultural Value Chain Program (CAVAC)

# **INTERVENTION UPDATE**



**FEBRUARY 2012** 

### INTERVENTION UPDATE

A great deal of planning goes into each of CAVAC's interventions. The following section provides a progress summary each of CAVAC's interventions for the period 1 July – 30 December 2011. Updates on 25 specific interventions are provided which include: a summary of the intervention; achievements; next steps; surprises, adjustments or problems; lessons learnt; and a list of associated team members. These updates give a more detailed summary of specific achievements to date, issues, and future directions, and show that in general, interventions are on track.

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# Legend

**Res** = Research; **Inp** = Input Markets; **Mar** = Production Markets; **Ext** = Extension; **Irr** = Water and Irrigation; **Bee** = Business Enabling Environment; and **Gen** = Others

Int. No: Ext 10.1 AWP No: 3.2 Date: 1 January 2011

#### Name: Support large input suppliers to improve extension service to farmers

**Summary:** The purpose of the proposed CAVAC intervention is to enhance the capacity of the company, Heng Pich Chhay (HPC), to invest more in extension to growers. As the company works with model farmers and retailers, this intervention will have good leverage / outreach to farmers. CAVAC will offer this type of support to other similar companies. It is desirable that other companies will copy the model and begin investment in agricultural extension.

The company understands the incentive of providing farmers' knowledge through field demonstrations and field days as they are marketing strategies. However, the company is still reluctant to invest more in field demonstrations and field days.

Achievements to Date: HPC team members completed the field demonstrations and farmer training for early wet and wet season rice as planned. They began using copies of the training resources produced by CAVAC, and will be branding and using them within their training programs for growers and their retailers. The company conducted 30 field demonstrations for wet season and another 10 will be conducted in dry season. The company conducted two field days on 17 and 18 November in Kampot and Takeo. The M&E team conducted surveys to measure changes in KAP. The results were reported. The effectiveness of both the one-day training and field days were marginal.

**Next steps:** Continue to monitor the implementation of Heng Pich Chhay's training and field days and measure impacts.

**Surprises**, **Adjustments or Problems**: The M&E report should be shared with HPC and future adjustments made to their training and field days.

**Lessons learnt:** Participatory training is not commonly used in Cambodia. HPC should adopt a more participatory style. Subsequently their trainings and field day effectiveness are expected to improve

Intervention team members: Kang Sideth, Thorn Rigeun, Kry Vong Socheat, Keo Chenda

#### Int. No: Ext 10.2 AWP No: 3.3 Date: 1 January 2011

Name: Creating awareness, interaction between support providers and sources of information on the benefit of better communication.

Summary: CAVAC intends to produce a magazine that creates awareness for the benefit of communication and giving information to retailers. Real cases will form the core of this. Retailers can call support providers and ask about product information. This would help to increase the retailers' knowledge about agricultural products, and thereby they can give meaningful advice to farmers. CAVAC desires that support providers and retailers understand that it is important to provide informational services for agriculture products.

Achievements to Date: CAVAC had negotiated with one company who was proposing publishing an agricultural magazine, Agritalk, in Khmer. However, negotiations broke down over the kind of support that was required. However we agreed that after a workshop on launching the results of a CAVAC-initiated survey on media, we might revisit the negotiations.

Another company, CN Business Consultants, produced a magazine, the New Farmer, and CAVAC began negotiations with them. Thus far, there has been little achievement for this intervention.

**Next steps:** CAVAC will re-enter negotiations with Agritalk in 2012 and will try to influence the New Farmer magazine to fulfil some of CAVAC's original objectives.

Surprises, Adjustments or Problems: It is important to link this work with the media survey.

**Lessons learnt:** Results from the media survey shows that few Cambodians depend on written language. For this reason CAVAC remains less active in this intervention, preferring to reach the higher goal of a private sustainable agro-magazine, rather than our own publication.

**Intervention team members:** Kang Sideth, Sourn Sophoan, Keo Chenda, Heng Sovathara, Ping Sodavy, Kry Vong Socheat

Int. No: Ext 10.3 AWP No: 3.2 Date: 1 January 2011

# Name: Pilot training methodology for model farmers to improve role and knowledge of model farmers

Summary: The objectives of the intervention are to develop stronger linkages between permanent sources of information (input suppliers) and model farmers, and to improve farmers' knowledge - especially initially on nutrient management and seed storage. After the focused discussions / trainings, model farmers will have more confidence in having full knowledge and thus, will provide better advice to their neighbour farmers. Secondly, model farmers will be more active in seeking advice from other permanent sources of knowledge. Because of better advice and higher reputation, farmers will be more active to seek knowledge and information from model farmers. This can also allow model farmers to maintain or improve their reputation and acknowledgement from the communities; in other words, their incentives for providing information in the first place. The permanent sources of information (input suppliers) might be more active in providing better knowledge / advice to model farmers, and other input suppliers might do similarly with other model farmers.

#### **Achievements to Date:**

- Trained nine Provincial Model Household Trainers with participatory teaching techniques allowing them to continue daily trainings in all three provinces. So far 3,200 households have been trained through 320 training sessions.
- Contracted a survey company to conduct a survey among model growers to measure changes in farmer practices due to the above training.
- Survey of KAP completed with only data analysis remaining.

**Next steps:** Continue to monitor and measure impact. We will ask the MTR to consider up-scaling this for 2013 onward.

**Surprises**, **Adjustments or Problems**: The initial training impact results are surprisingly good with a remarkable number of growers changing their practices. Already there are a remarkable number of model grower 'clients' or neighbours who not only have remarked about the model farmers' changes, but some have also changed their practices

**Lessons learnt:** Having both the IIRR training and hiring the local consultant who taught participatory teaching techniques was pivotal to large impact of the model farmer training.

**Intervention team members:** Keo Chenda, Kry Vong Socheat, Kang Sideth, Soun Sophoan, Thorn Riguen

#### Intervention Update Int. No: Inp 10.1 AWP No: 1.3 Date: 17 January 2012

#### Name: Support Fertiliser Company in Providing Training to Retailers

**Summary:** Through Supply Mapping and Analysis task CAVAC's interviews with farmers and retailers demonstrated that most retailers do not have knowledge of appropriate fertiliser application. Farmers use fertiliser based on their peer's advice, own testing, and available budget; in most cases this does not provide an optimal yield.

CAVAC intends to assist fertiliser companies to provide better services to farmers through their retailers. Fertiliser retailers interact directly with farmers and can provide greater outreach than working directly with farmers. The expected impact if a retailer provides services such as advice to farmers, is that demand for that retailer increases providing an incentive for the retailer to continue supplying information on usage of the product. Due to the success of these retailers, other retailers will offer similar services in order to retain their customers.

The more products and services offered by retailers, the more information and choice available to farmers. As such farmers will increasingly be able to access information on the appropriate application of fertiliser that will help farmers to more efficiently produce their crops. Additionally, by training the retailers, the fertiliser company will enhance its relationship with retailers enabling improved quality control at the retailer level.

#### **Achievements to Date:**

- 1. Two Training Need Assessments conducted by Ye Tak and CAVAC
- 2. One National Retailer Training conducted by Ye Tak and supported by CAVAC
- 3. Six provincial retailer trainings conducted by Ye Tak and supported by CAVAC
- 4. Ye Tak Quality Assurance (QA) Assessment conducted by international consultant; report expected to be submitted in January 2012

### **Next steps:**

- 1. Design and implement awareness campaign of QA system with Ye Tak
- Look for fertiliser retailers who are interested in conducting field demonstrations with seed producers
- 3. Work with one or two more partners in the field (i.e. fertiliser companies)
- 4. BEE to investigate MAFF policy on fertiliser import quota
- Link source knowledge of private sector to government research institutions to share and update new knowledge and technology
- 6. Link private sector as source of knowledge to call centres

Surprises, Adjustments or Problems: Originally Ye-Tak wanted support in retailer training and quality assurance but after initial discussions lost focus on the QA side of the activity. As such QA was not included in the intervention plan, however after further discussions and relationship building Ye Tak renewed its interest in this - primarily through the vision of the owner. The intervention plan will now be updated to include QA work.

Lessons learnt: Ye Tak is being encouraged by its supplier in Vietnam (Binh Dien) to continue working on these activities. In fact Binh Dien is willing to contribute towards CAVAC-Ye Tak activities.

Ye Tak has decided to recruit two more staff to improve service delivery to its clients, these are early signs that the CAVAC intervention with Ye-Tak is on track to deliver significant impact

Intervention team members: Pith Lyna, Sideth, Sovathara, Sopheavy, Lyna, Chenda and Socheat

#### Intervention Update Int. No: I

Int. No: Inp 10.2 AWP No: 1.2 Date: 15 January 2012

#### Name: Improving Quality and Availability of Commercial Seed

**Summary:** The main objectives of rice seed producers are to produce a quality rice seed and meet current demand. The key challenges for rice seed producers are formalisation, quality assurance and branding. Therefore, CAVAC's intended interventions are divided into two phases; 1) Formalisation and 2) Business Expansion. During the assessment process one seed producer indicated an interest in becoming a registered seed company. This company belongs to Mr Vanna.

#### CAVAC's initial intervention plan included:

- A cost-sharing activity to hire a Coordinator who would facilitate the registration process of the medium seed producers (current annual sales of 200 tons).
- Business expansion assistance which could involve marketing and management consulting. The primary condition for this support is the successful formalisation of the company.

However in March 2011 a significant renegotiation happened which resulted in two main changes. The owners would manage the formalisation (registration) of the seed company without CAVAC support; instead CAVAC would provide a minor contribution to equipment required for the expansion of the new company.

#### **Achievements to Date:**

#### Activities completed to date:

- 1. Study completed in intellectual property rights for non-Cambodian rice varieties
- 2. Business plan for new rice seed company finalised
- 3. Rice seed production methodology assessment and rice seed production training undertaken

#### Changes observed with the seed company:

- 1. A formally established seed company with correct documentation from all relevant ministries. (only the second domestically registered seed company)
- 2. Enhanced production capacity with three more staff employed.
- 3. The business plan (included financing requirements) being used to actively seek investors.
- 4. Seed company is recruiting a Vietnamese rice seed production supervisor to ensure the quality of the production methodology

#### **Next steps:**

1. Further support from CAVAC in business development such as branding / marketing is foreseen but not yet specified.

2. An investment plan for equipment is part of the business plan and will be implemented in 2012. There may be a very minor contribution from CAVAC to the investments required.

**Surprises, Adjustments or Problems:** CAVAC had an original agreement to help with the formalisation of the company. In the process of the formalisation, it was concluded that this process would be more effectively managed by the company itself. Expectations of what CAVAC would be able to contribute towards the actual investment in equipment were wildly exaggerated and needed to be clarified. This led to some serious renegotiations.

**Lessons learnt:** Clarifying expectations is essential. It is not good enough after several talks to assume that all is OK. It needs to be continually assessed through practical negotiations

Intervention team members: Heng Sovathara, Tin Mola, Hoy Sokkea, and Pith Lyna

#### Intervention Update Int. No: Inp 10.3 AWP No: 1.2 Date: 17 January 2012

#### Name: Support Fertiliser Company in Providing Training to Retailers

**Summary:** According to CAVAC's Supply Mapping and Analysis, most retailers do not have knowledge of appropriate fertiliser application. Farmers use fertiliser based on peer advice, self-testing, and budget constraints. In most cases this does not lead to optimal results.

CAVAC aims to help fertiliser companies provide better services to farmers through their retailers. As retailers interact directly with farmers, this approach can provide greater outreach.

If a retailer provides services such as advice to farmers, then that retailer is likely to experience an increase in demand, providing an incentive to continue supplying application information. In turn, other retailers notice the success of those provided the additional service and begin to offer similar services to retain their customers. This crowding in is the impact expected. The more products and services offered by retailers, the more information and choice available to farmers. Farmers will increasingly be able to access the information on the appropriate application of fertiliser that will help farmers to more efficiently produce their crops.

Additional benefits include the enhanced relationship between the retailers and the company. Through training retailers, the company will enhance its relationship with retailers, enabling improved quality control at the retailer level.

#### **Achievements to Date:**

- 1. Two Training Need Assessments have been conducted by Ye Tak and CAVAC.
- 2. One National Retailer Training was conducted by Ye Tak and supported by CAVAC.
- 3. Six provincial retailer trainings have been conducted by Ye Tak and supported by CAVAC.
- 4. A Quality Assurance (QA) Assessment for Ye Tak has been undertaken by an international consultant (the report is currently being finalised).

### **Next steps:**

- 1. Design and implement awareness campaign of Q&A system with Ye Tak.
- 2. Locate fertiliser retailers who have an interest in conducting field demonstrations with seed producers.
- 3. Work with one or two more partners.
- 4. BEE to investigate MAFF policy on fertiliser import quota.
- 5. Link source knowledge of private sector to government research institutions to share and update new knowledge and technology.
- 6. Link private sector as source of knowledge to call centres.

**Surprises**, **Adjustments or Problems**: Originally Ye-Tak wanted support in retailer training and quality assurance however over time the focus on the quality assurance side of the activity was lost, thus it was not included in the Intervention Plan. Time and a stronger relationship with Ye Tak have renewed the interest in quality assurance. The intervention plan will now be updated to include quality assurance work.

**Lessons learnt:** Ye Tak is being encouraged by its supplier in Vietnam to continue working on these activities to the extent that Binh Dien is willing to contribute towards CAVAC-Ye Tak initiatives.

Ye Tak have decided to recruit two more staff to improve service delivery to its clients.

These are early signs that the CAVAC intervention with Ye-Tak is on track to deliver significant impact

Intervention team members: Pith Lyna: Sideth, Sovathara, Sopheavy, Lyna, Chenda and Socheat

Int. No: Irr 10.1 AWP No: 2.3 Date: 1 January 2011

Name: Development and construction of small irrigation schemes: Krapum Chuk Canal, Takeo Province

**Summary:** The Commune of Krapum Chuk grows wet season paddy close to the PRASAC canal. Agricultural production is limited by unreliable access to water and annual flooding. The communities have expressed a need for canal rehabilitation that will improve water supply and increase the area with reliable water for double cropping. The Command area is about 1,000ha.

The 4km long Krapum Chuk canal (otherwise known as Canal 85) was selected for rehabilitation and fast tracked for construction at the start of CAVAC in March 2010. Construction of the first phase was completed in June 2010. A 1.5km extension was constructed in 2011 and was completed in May 2011.

A FWUC is being established for the canal.

**Achievements to Date:** The detailed design was undertaken by the PDWRAM under an agreement with CAVAC.

Tenders were invited for the construction contract and construction was awarded to Tiang Chong Oing.

Construction commenced in April 2010 and was completed in June 2010. The community requested that the canal be extended a further 1.5km to serve a larger command area and quotes were sort for this work. The same contractor was engaged for this minor extension.

Construction supervision was done by the PDWRAM under an agreement with CAVAC.

CAVAC has commissioned the PDWRAM to establish and build capacity of a FWUC for this canal. The FWUC has been established through meetings and elections at the communities, and capacity building has commenced.

Next steps: Complete capacity building for the FWUC.

#### **Surprises, Adjustments or Problems:**

**Lessons learnt:** Daily construction supervision is important to ensure that the contractor's work meets the requirements of the design.

**Intervention team members:** Phai Sok Heng, Khiev Daravy, Chhim Sophea, Soeur Sophorn, Nong Phirom

Name: Development and construction of small irrigation schemes: Prey Tonle Canal, Kampot Province

**Summary:** The Commune of Prey Tonle grows wet season paddy close to the Prek Ansar River. Agricultural production is limited by unreliable access to water. The communities have expressed a need for canal rehabilitation that will improve water supply and increase the area with reliable water for double or triple cropping. The Command area is about 700ha.

The 3.2km long Prey Tonle canal was selected for rehabilitation and fast tracked for construction at the start of CAVAC in March 2010. Construction was completed in June 2010.

A FWUC is being established for the canal.

**Achievements to Date:** The detailed design was undertaken by the PDWRAM under an agreement with CAVAC.

Tenders were invited for the construction contract and construction was awarded to Tiang Chong Oing.

Construction commenced in April 2010 and was completed in June 2010.

Construction supervision was done by the PDWRAM under an agreement with CAVAC.

CAVAC has commissioned the PDWRAM to establish and build capacity of a FWUC for this canal. The FWUC has been established through meetings and elections at the communities, and capacity building has commenced.

**Next steps:** Complete capacity building for the FWUC.

Surprises, Adjustments or Problems: none

**Lessons learnt:** Daily construction supervision is important to ensure that the contractor's work meets the requirements of the design.

Intervention team members: Phai Sok Heng, Khiev Daravy, Chhim Sophea, Soeur Sophorn, Nong Phirom

## Int. No: Irr 10.3 AWP No: 2.3 Date: 1 January 2011

Name: Development and construction of small irrigation schemes: Tumnub Lok Canal, Takeo Province

**Summary:** The Communes of Pech Sa and Krapum Chuke grow wet season paddy and some limited dry season paddy. Agricultural production is limited by unreliable access to water. The communities expressed a need for canal rehabilitation that will improve water supply and increase the area with reliable water for double cropping. The Command area is about 3,700ha.

The Tumnub Lok canal was selected for rehabilitation. Feasibility Studies were carried out and the canal was surveyed and designed. Construction commenced in March 2011, and is underway.

A FWUC is being established for the canal.

**Achievements to Date:** The detailed design was undertaken by the PDWRAM under an agreement with CAVAC.

Tenders were invited for the construction contracts. Tenders were evaluated by MOWRAM, PDWRAM and CAVAC.

Construction commenced in April 2011. The Contractor made good progress but was unable to finish before the onset of the wet season and annual flooding. Approximately 80% of the original work has been completed so far. A Contract Amendment has been signed with the contractor for additional drainage structures along the canal.

Construction supervision is being done by the PDWRAM under an agreement with CAVAC.

CAVAC has commissioned the PDWRAM to establish and build capacity of a FWUC for this canal. The FWUC has been established through meetings and elections at the communities, and capacity building will commence shortly.

Next steps: Complete construction of the canal. Expect completion in April or May 2012.

Complete capacity building for the FWUC.

Surprises, Adjustments or Problems: Ground conditions for construction were very poor. Due to the wet and poor soil conditions, the embankments were not able to be compacted as planned. Some lengths of the canal side slopes have collapsed. A full inspection of the canal will be undertaken in January to determine any remedial action required.

**Lessons learnt:** Daily construction supervision is important to ensure that the contractor's work meets the requirements of the design.

Intervention team members: Phai Sok Heng, Khiev Daravy, Chhim Sophea, Soeur Sophorn

# Name: Development and construction of small irrigation schemes: Kveng Tayi Canal, Takeo Province

**Summary:** The Commune of Prey Yutka grows wet season paddy and some limited dry season close to the PRASAC canal. Agricultural production is limited by unreliable access to water. The communities have expressed a need for canal rehabilitation that will improve water supply and increase the area with reliable water for double cropping. The Command area is about 2,000ha.

The Kveng Tayi canal was selected for rehabilitation. Feasibility Studies were carried out and the canal was surveyed and designed. Construction commenced in April 2011, and is underway.

A FWUC is being established for the canal.

**Achievements to Date:** The detailed design was undertaken by the PDWRAM under an agreement with CAVAC. Tenders were invited for the construction contracts. Tenders were evaluated by MOWRAM, PDWRAM and CAVAC.

Construction commenced in April 2011. The Contractor made good progress but was unable to finish before the onset of the wet season and annual flooding. Approximately 80% of the work has been completed so far. Two additional crossing structures, requested by the community, will be added to the contract through a contract amendment. Construction is expected to resume in February 2012 and be completed by April 2012.

Construction supervision is being done by the PDWRAM under an agreement with CAVAC.

CAVAC has commissioned the PDWRAM to establish and build capacity of a FWUC for this canal. The FWUC has been established through meetings and elections at the communities, and capacity building will commence shortly.

Next steps: Complete construction of the canal. Expect completion in March or April 2012.

Complete capacity building for the FWUC.

**Surprises, Adjustments or Problems:** Ground conditions were very wet which made construction slow. For much of the canal construction, the contractor had to work with cofferdams. The wet soil also made forming and compacting embankments very challenging.

**Lessons learnt:** Daily construction supervision is important to ensure that the contractor's work meets the requirements of the design.

**Intervention team members:** Phai Sok Heng, Khiev Daravy, Chhim Sophea, Soeur Sophorn, Nong Phirom

Int. No: Irr 10.5 AWP No: 2.3 Date: 1 January 2011

Name: Development and construction of small irrigation schemes: Canal 19I, Takeo Province

**Summary:** The Commune of Angkor Borei grows wet season paddy and some limited dry season paddy using tubewells. Water quality in the groundwater is not good and impacts on the yield of the dry season crop. Agricultural production is limited by unreliable access to water. The communities have expressed a need for canal rehabilitation that will improve water supply and increase the area with reliable water for double cropping.

The existing Canal 19 (Pol Pot canal) will be rehabilitated along its existing alignment for a length of 3 km. This will open up a command area of around 450ha to double cropping. Water from the tubewells will no longer be required. Overall, just over 500 households will benefit from this intervention. There is no FWUC active in the area at present. Water will be provided from the Stueng Angkor by gravity.

Canal 19 selected for Feasibility Study. It was found that the canal passes through two communes and the commune close to the river did not agree to provide land for canal construction. As a result, implementation did not proceed.

**Achievements to date:** The Feasibility Study found that there were land issues at the head of the canal that could not be resolved. Rehabilitation of Canal 19 did not proceed.

**Next steps:** No further action required.

Surprises, Adjustments or Problems: Land issues prevented rehabilitation of this canal.

Lessons learnt: Identify potential land issues as soon as possible in feasibility studies.

Intervention team members: Phai Sok Heng, Khiev Daravy, Chhim Sophea, Soeur Sophorn

Int. No: Irr 10.6 AWP No: 2.3 Date: 1 January 2011

# Name: Development and construction of small irrigation schemes: Shove Andet Canal, Kampot Province

**Summary:** The Commune of Sdach Kong Khang Cheung grows wet season paddy and some limited dry season close to a perennial river, the Preaeak Tuk Meas. Agricultural production is limited by unreliable access to water. The communities have expressed a need for canal rehabilitation that will improve water supply and increase the area with reliable water for double cropping. The Preaeak Tuk Meas is influenced by downstream high water levels from the Mekong and Vente Canal systems. The Command area is about 2,000ha.

The Shove Andet canal was selected for rehabilitation. Feasibility Studies were carried out and the canal was surveyed and designed. Construction commenced in April 2011, and is underway.

A FWUC is being established for the canal.

**Achievements to Date:** The detailed design was undertaken by the PDWRAM under an agreement with CAVAC.

Tenders were invited for the construction contracts. Tenders were evaluated by MOWRAM, PDWRAM and CAVAC.

Construction commenced in April 2011. The Contractor made good progress but was unable to finish before the onset of the wet season and annual flooding. Approximately 80% of the work has been completed so far. Some additional structures have been added to the contract through a contract amendment to improve drainage and canal functionality. Construction has now resumed.

Construction supervision is being done by the PDWRAM under an agreement with CAVAC.

CAVAC has commissioned the PDWRAM to establish and build capacity of a FWUC for this canal. The FWUC has been established through meetings and elections at the communities, and capacity building will commence shortly.

Next steps: Complete construction of the canal. Expect completion in February or March 2012.

Complete capacity building for the FWUC.

Surprises, Adjustments or Problems: none

**Lessons learnt:** Daily construction supervision is important to ensure that the contractor's work meets the requirements of the design.

Intervention team members: Phai Sok Heng, Khiev Daravy, Chhim Sophea, Soeur Sophorn, Nong Phirom

### Int. No: Irr 10.7 AWP No: 2.3 Date: 1 January 2011

# Name: Development and construction of small irrigation schemes: O'Kak Canal, Kampot Province

**Summary:** The Commune of Tuk Meas Kang Lech grows wet season paddy and some limited dry season close to a perennial river, the Preaeak Tuk Meas. Agricultural production is limited by unreliable access to water. The communities expressed a need for canal rehabilitation that will improve water supply and increase the area with reliable water for double or triple cropping. The Preaeak Tuk Meas is influenced by downstream high water levels from the Mekong and Vente Canal systems. Command area is about 1,000ha.

The O'Kak canal was selected for rehabilitation. Feasibility Studies were carried out and the canal was surveyed and designed. Construction commenced in April 2011, and is underway.

A FWUC is being established for the canal.

**Achievements to Date:** The detailed design was undertaken by the PDWRAM under an agreement with CAVAC.

Tenders were invited for the construction contracts. Tenders were evaluated by MOWRAM, PDWRAM and CAVAC.

Construction commenced in April 2011. The Contractor made good progress but was unable to finish before the onset of the wet season and annual flooding. Approximately 80 % of the work has been completed so far. Some additional drainage and crossing structures will be added, and additional erosion protection will be added at the road box culverts. Construction has now resumed.

Construction supervision is being done by the PDWRAM under an agreement with CAVAC.

CAVAC has commissioned the PDWRAM to establish and build capacity of a FWUC for this canal. The FWUC has been established through meetings and elections at the communities, and capacity building will commence shortly.

Next steps: Complete construction of the canal. Expect completion in March 2012.

Complete capacity boiling for the FWUC.

#### **Surprises, Adjustments or Problems:**

**Lessons learnt:** Daily construction supervision is important to ensure that the contractor's work meets the requirements of the design.

Intervention team members: Phai Sok Heng, Khiev Daravy, Chhim Sophea, Soeur Sophorn, Nong Phirom

Int. No: Irr 10.8 AWP No: 2.3 Date: 1 January 2011

### Name: Development and construction of small irrigation schemes: Thnoat Canal, Kampot **Province**

Summary: The Commune of Thnoat Chong Srang grows wet season paddy and some limited dry season close to a perennial river, the Preaeak Ansar. Agricultural production is limited by unreliable access to water. The communities expressed a need for canal rehabilitation that will improve water supply and increase the area with reliable water for double or triple cropping. The Preaeak Ansar is influenced by downstream high water levels from the Mekong and Vente Canal systems. Command area is about 3,500ha.

The Thnoat canal was selected for rehabilitation. Feasibility Studies were carried out and the canal was surveyed and designed. Construction commenced in April 2011, and is underway.

A FWUC is being established for the canal.

Achievements to Date: The detailed design was undertaken by the PDWRAM under an agreement with CAVAC.

Tenders were invited for the construction contracts. Tenders were evaluated by MOWRAM, PDWRAM and CAVAC.

Construction commenced in April 2011. The Contractor made good progress but was unable to finish before the onset of the wet season and annual flooding. Approximately 80% of the work has been completed so far. Additional drainage structures and erosion protection have been added to through a contract amendment. Construction has now resumed.

Construction supervision is being done by the PDWRAM under an agreement with CAVAC.

CAVAC has commissioned the PDWRAM to establish and build capacity of a FWUC for this canal. The FWUC has been established through meetings and elections at the communities, and capacity building will commence shortly.

Next steps: Complete construction of the canal. Expect completion in March 2012.

Complete capacity building for the FWUC.

Surprises, Adjustments or Problems: The discussions of the canal alignment failed to identify a house very close to the canal boundary. Process for community consent for canal construction has been improved for future work.

Lessons learnt: Daily construction supervision is important to ensure that the contractor's work meets the requirements of the design.

Intervention team members: Phai Sok Heng, Khiev Daravy, Chhim Sophea, Soeur Sophorn, Nong Phirom

Int. No: Irr 10.9 AWP No: 2.3 Date: 1 January 2011

Name: Development and construction of small irrigation schemes: Prey Tonle 2, Kampot Province

**Summary:** The Commune of Prey Tonle grows wet season paddy and some limited dry season close to a perennial river. Agricultural production is limited by unreliable access to water. The communities have expressed a need for canal rehabilitation that will improve water supply and increase the area with reliable water for double cropping. The perennial river is influenced by downstream high water levels from the Mekong and Venti Canal systems.

Canal rehabilitation is required for a length of 2.92 km, and a new extension canal is required for 3.77 km. Total length of planned canal works is 6.69 km. This will open up a command area of around 1,100ha to double cropping. The benefiting number of households is approximately 450. There are no known environmental issues that would compromise this intervention's viability. There is a need for agreement on land take along the alignment of the canal. This will be resolved or otherwise during the Feasibility Study. There is no existing FWUC active in the area and there are no active water sellers. Water supply is by gravity from the Preaek Ansar.

Prey Tonle 2 Canal was selected for Feasibility Study. It was found that the proposed canal alignment does not follow an existing canal and that there are large land holders in the area. Land issues are expected so it was decided not to proceed with rehabilitation.

**Achievements to date:** The Feasibility Study found that there could be land issues on the canal alignment. Rehabilitation of Prey Tonle 2 Canal did not proceed.

Next steps: No further action required.

Surprises, Adjustments or Problems: Land issues prevented rehabilitation of this canal.

Lessons learnt: Identify potential land issues as soon as possible in feasibility studies.

Intervention team members: Phai Sok Heng, Khiev Daravy, Chhim Sophea, Soeur Sophorn

Int. No: Irr 10.10 AWP No: 2.3 Date: 1 January 2011

Name: Development and construction of small irrigation schemes: Beoung Khang Cheng Canal, Kampong Thom Province

**Summary:** The Commune of Boeung grows wet season paddy and some limited dry season close to the January 1st Canal. Agricultural production is limited by unreliable access to water. The communities have expressed a need for rehabilitation of two adjacent canals that will improve water supply and increase the area with reliable water for double cropping.

The existing Boeung Khang Cheung Canal and Norng Cheng Canal will be rehabilitated along their respective lengths of 2.7km and 3.8km, along their existing alignments. This will open up a command area of around 750ha to double cropping. Overall, just over 1200 households will benefit from this intervention. There are no known land, environmental or other issues that would compromise this intervention's viability. Despite the fact that Boeung Khang Cheung was rehabilitated in 2005, there is no existing FWUC active in the area. Water supply is by gravity from the January 1st Canal.

Achievements to date: The Feasibility Study found that there are risks to sustainability to this canal. It was rehabilitated in 2005 but no maintenance has been done since that time, suggesting that community commitment to take of the canal is low. No FWUC was established. It was decided not to proceed to implementation.

Next steps: No further action required.

**Surprises**, **Adjustments or Problems**: High risk to sustainability prevented rehabilitation of this canal.

**Lessons learnt:** Community commitment to operation and maintenance is important to reduce risks to sustainability.

Intervention team members: Phai Sok Heng, Khiev Daravy, Chhim Sophea, Soeur Sophorn

Int. No: Irr 10.11 AWP No: 2.3 Date: 1 January 2011

Name: Development and construction of small irrigation schemes: Doun Tom Canal, Kampong Thom Province

**Summary:** The Commune of Doun Tom grows wet season paddy and some limited dry season close to the January 1st Canal. Agricultural production is limited by unreliable access to water. There is some confusion on whether rehabilitation of this canal is supported by communities. Some farmers have identified an alternative alignment for rehabilitation. This needs to be resolved.

The existing Doun Tom Canal will be rehabilitated along its existing alignment for a length of 3.8 km. This will open up a command area of around 460ha to double cropping. Overall, just over 500 households will benefit from this intervention. There are no known land, environmental or other issues that would compromise this intervention's viability. There is no existing FWUC active in the area. Water supply is by gravity from the January 1st Canal.

**Achievements to date:** The Feasibility Study found that the alignment of the canal to rehabilitate was not supported by the community. There are therefore risks to sustainability of this canal. It was decided not to proceed to implementation.

Next steps: No further action required.

**Surprises**, **Adjustments or Problems**: High risk to sustainability prevented rehabilitation of this canal.

**Lessons learnt:** Community commitment to operation and maintenance is important to reduce risks to sustainability.

Intervention team members: Phai Sok Heng, Khiev Daravy, Chhim Sophea, Soeur Sophorn

Int. No: Irr 10.12 AWP No: 2.3 Date: 1 January 2011

# Name: Development and construction of small irrigation schemes: Thnoat Chum Canal, **Kampong Thom Province**

Summary: The Commune of Thnoat Chum grows limited wet season and dry season paddy with water from the nearby January 1st Canal. Agricultural production is limited by unreliable access to water. The communities expressed a need for rehabilitation of the canals that will improve water supply and increase the area with reliable water for double cropping. Command area is about 1.400ha.

The Thnoat Chum canal was selected for rehabilitation. Feasibility Studies were carried out and the canal was surveyed and designed. Construction commenced in April 2011, and is underway.

A FWUC is being established for the canal.

Achievements to Date: The detailed design was undertaken by the PDWRAM under an agreement with CAVAC.

Tenders were invited for the construction contracts. Tenders were evaluated by MOWRAM, PDWRAM and CAVAC.

Construction commenced in April 2011. The Contractor started slowly and was unable to finish before the onset of the wet season and annual flooding. Approximately 80% of the work has been completed so far but a number of additional structures will need to be added to the contract to improve functionality. In addition, it is noted that the canal connecting Thnoat Chum with the January 1st Canal requires additional structures and some repair. This work will also be added to the contract. Construction will resume soon.

Construction supervision is being done by the PDWRAM under an agreement with CAVAC.

CAVAC has commissioned the PDWRAM to establish and build capacity of a FWUC for this canal. The FWUC has been established through meetings and elections at the communities, and capacity building will commence shortly.

Next steps: Complete construction of the canal. Expect completion in April 2012.

Complete capacity building for the FWUC.

Surprises, Adjustments or Problems: Water for this canal is from the 1st January canal, via a canal constructed under ADB funding. This ADB canal needs some design improvements and some repairs to ensure that water can be delivered to Thnoat Chum Canal. This work has been included in a Contract Amendment for the Contractor.

Lessons learnt: Daily construction supervision is important to ensure that the contractor's work meets the requirements of the design.

Intervention team members: Phai Sok Heng, Khiev Daravy, Chhim Sophea, Soeur Sophorn, Nong Phirom

Int. No: Irr 10.13 AWP No: 2.3 Date: 1 January 2011

# Name: Development and construction of small irrigation schemes: Angko Canal, Kampong Thom Province

**Summary:** The Commune of Kampong Kor grows wet season paddy and some limited dry season close to the Stueng Sean River. Agricultural production is limited by unreliable access to water. The community expressed a need for rehabilitation of the Angko Canal to improve water supply and increase the area with reliable water for double cropping.

The Angko canal was selected for rehabilitation. Feasibility Studies were carried out and the canal was surveyed and designed. Construction commenced in April 2011, and is underway.

A FWUC is being established for the canal. .

**Achievements to Date:** The detailed design was undertaken by the PDWRAM under an agreement with CAVAC.

Tenders were invited for the construction contracts. Tenders were evaluated by MOWRAM, PDWRAM and CAVAC.

Construction commenced in April 2011. The Contractor started slowly and was unable to finish before the onset of the wet season and annual flooding. Approximately 80% of the work has been completed so far. The community has requested that construction resume after the harvest of the recession paddy crop, which has now been planted. This construction is to resume around March 2012. The community has advised that they wish the canal to be extended further south, and this will be considered.

Construction supervision is being done by the PDWRAM under an agreement with CAVAC.

CAVAC has commissioned the PDWRAM to establish and build capacity of a FWUC for this canal. The FWUC has been established through meetings and elections at the communities, and capacity building will commence shortly.

**Next steps:** Complete construction of the canal after the recession crop is harvested. Expect completion in April or May 2012.

Complete capacity building for the FWUC.

**Surprises**, **Adjustments or Problems**: The Contractor's construction quality was below standard initially. Some corrective action was required at some of the structures.

**Lessons learnt:** Daily construction supervision is important to ensure that the contractor's work meets the requirements of the design.

Intervention team members: Phai Sok Heng, Khiev Daravy, Chhim Sophea, Soeur Sophorn, Nong Phirom

Int. No: Inp 11.1 AWP No: 1.2 Date: 17 January 2012

#### Name: Improving the efficiency of irrigation pumps

Summary: This intervention began with a study of pump efficiency by IDE Cambodia which revealed that large gains can be made by choosing the correct pump for the right application, and by letting the pump run at the right speed.

CAVAC's next step will be designing a test stand that demonstrates the efficiency gains that can be achieved by using the right pumping combinations. The stand will travel to the provinces creating awareness and interest on pump efficiency. Based on interest from retailers and wholesalers, CAVAC will design the following interventions to the support providers: 1) advice on better engine-pump combinations; 2) advice on units appropriate for application; 3) advice on optimal pump operation (speed, tubes etc.).

#### **Achievements to Date:**

- 1. Research on common uses of pumps and engines.
- 2. Focus Group Discussion with Pump Retailers.
- 3. Pump demonstration on efficiency and correct matching in Takeo and Kampot.
- 4. Survey on constraints and opportunities with pump producers and retailers in Takeo and Kampot.
- 5. Small seminar in Takeo with pump retailers on possible intervention plans.

#### **Next steps:**

- 1. Design and conduct pump awareness campaign.
- 2. Working with interested retailers to improve their knowledge so they can provide better advice on pump efficiency to farmers.
- 3. Seek partnership with private company for a possible intervention.
- 4. Provide training to junior producers.
- 5. Discuss with Department of Engineering at MOWRAM for possible result-based contract.

Surprises, Adjustments or Problems: A key challenge of the pump market is that producers are small and have no local design capacity. Models are currently copied from imported machines. Capacity to understand and adjust faulty designs is limited. Further, farmers seem to be primarily motivated by other farmers when selecting a water pump.

Lessons learnt: Knowledge transfer should be based on existing methods with less experienced producers learning from more experienced produces. Awareness campaigns to influence the pump selection of farmers should have a strong focus on farmers and not necessarily pump retailers. Information received from pump retailers appears to have little impact on farmers.

Intervention team members: Sovathara, Sophea, Sophoan, Lyna

Int. No: Ext 11.1 AWP No: 1.2 Date: 17 January 2012

#### Name: Support Media Agency to produce quality TV programs

**Summary:** The objective of this intervention is, by supporting a production company in their capacity to produce quality agricultural programming; broadcast media will be recognised as a viable option for disseminating agricultural information. It is intended that the new program will become a focus for agricultural advertising thereby supporting brand development and the image of important agricultural companies.

By generating advertising revenue the program will become commercially viable with a significant chance that others will copy the example and also start producing quality programs for a rural audience. Farmers will then have improved information access from several sources and will be able to select the information that best fits their reality

An activity funded by CAVAC will be the commissioning of rural media habits research with the intention of generating interest into the media market for the rural population thereby generating advertising interest. Finally this will be augmented by an appraisal of existing agricultural programs to generate initial feedback on the quality of existing agricultural programs.

More interventions will follow that will help companies with an appropriate commercial format by assisting in preparing demonstrations and linking companies to funds.

#### **Achievements to Date:**

- 1. Support has been provided to Delight Cambodia in producing a quality agriculture program:
  - a. Capacity building on agriculture knowledge:
    - August 2011, one exchange visit to model farmer training by two technical production staff from Delight
    - October 2011, CAVAC facilitated the linking meeting (at CAVAC's office) between Delight Cambodia and local / international agriculture project / organisation / research institute in order to build up a network among agriculture sector and to be a source of information or an agriculture technical supporter for Delight's TV series production.
    - October 2011, two technical staff from Delight joined the 2nd National Farmer's Forum Consultation (funded by IFAD / FAO, organised by CAFAP-Cambodia, NIA) in Siem Reap to build networks among other agriculture organisations. In this farmer's forum, Delight Cambodia had the opportunity to present their TV series concept to the crowd. This received significant interest from participants such as: Dr Ms Beatriz Delrosario (Betty) from FAORAP representative, Mr Sok Sotha, Managing director and MTCP SC member, Dr Mak Soeurn-Director of MAFF's media department, Mr Uy Kamal-Head of GHG Inventory and Mitigation Office-Department of Climate Change-Ministry of Environment.
    - October 2011, an exchange visit to Vietnam on the technical use of pesticides and agriculture production in which two technical production staff from Delight joined Nokorthom Agriculture Development Co. Ltd for this exchange visit.

- b. Assistance with basic technical agriculture knowledge for script development
  - December 2011, Delight's research team travelled to 10 provinces in Cambodia to undertake focus group discussions with different farmers who grow vegetable, rice, fruit trees, and raise chickens and pigs to understand their agriculture practices for script development.
  - January 2012, Delight has briefed their script writer team to write the script for pilot video.

#### c. Capacity building on media

 Jan 2012, two technical production staff from Delight enrolled the media training in London for five weeks starting from 25 Jan - 1 Mar 2012. This media training will focus on media production techniques.

#### 2. Media Research

- A media habit research study has been undertaken across four provinces: Kampot, Takeo,
   Kampong Thom, and Battambang to understand media preferences of the rural population.
- A quality assessment of current agriculture programs on TV and radio has been completed.
   This aimed to understand production quality and techniques of media specialist and the preference of agriculture program of farmers.

#### **Next steps:**

- 1. Workshop to present research findings from Media Habit Research and Quality Assessment on Current Agriculture Programs, and to search for new interventions or other possibilities
- 2. Exposing Delight to good practices of commercial media that focuses on farmers
- 3. Assist Delight in developing pilot video
- 4. Delight to organise an event to present pilot video to potential advertisers to get their interest (and to test format)
- 5. Delight to do second focus group discussion with farmers to present produced pilot video to capture their feedback
- 6. Discuss with Delight further steps after collecting all the feedback from the market

Surprises, Adjustments or Problems: None at this stage

Lessons learnt: Currently implementation is going as planned.

Intervention team members: Thea Sophy, Ouk Nimul, Hoy Sokkea, Kang Sidet

Int. No: Inp11.2 AWP No: 1.2 Date: 15 January 2012

# Name: Providing Training to Small Seed Producers (production knowledge and seed marketing)

**Summary:** CAVAC's intervention aims to provide individual small seed producers with training in proper seed production and seed marketing knowledge. This training is based on what the seed producers believe they need.

Training in appropriate seed production will enable small seed producers to increase their seed quality, making better quality seed available to their customers (mostly small farmers), leading to better yields. There is no expectation that seed production will increase in the short term, as seed production is labour intensive and practices are not presently mechanised.

Training in seed marketing, responding to market demand and / or customer satisfaction will enhance the quality of service received from small seed producers and encourage other seed producers to crowd in. This will improve the level at which small seed producers compete.

#### **Achievements to Date:**

- 1. Completed a Training Needs Analysis for Small Seed Producers.
- 2 Developed Small Rice Seed Producer Training Modules.

#### **Next steps:**

- 1 Conduct training (Jan and Feb 2012)
- 2 Consider seed producer capacity development in branding / marketing

**Surprises**, **Adjustments or Problems**: Due to the increased availability of commercial wet season varieties, the Golden Seed Company has begun producing more wet season seed varieties.

**Lessons learnt:** The focus of CAVAC's training interventions is to improve seed quality provided by existing small seed producers.

Most seed producers have been involved in various training programs; from PDA, AQIP or an NGO. A challenge for CAVAC was to design a training program that would be relevant due to variety of trainings received.

Intervention team members: Heng Sovathara, Tin Mola, Hoy Sokkea, Pith Lyna, Nin Charya

Int. No: Inp 11.3 AWP No: 1.2 Date: 16 January 2012

#### Name: Support associations to promote modern variety for wet season rice seed

Summary: CAVAC supports associations based on their constraints in seed production. This could include, inter alia, quality control of seed production. CAVAC can also offer advertising support to promote modern varieties through field demonstrations. This can also include aspects of optimal input usage for wet season rice farmers.

Optimal input usage varies in different conditions. CAVAC can also support the dialogue of farmers and associations to understand their views on what is optimal input usage in their context. Adopting new varieties and increasing input usage is a high risk activity for many farmers, CAVAC can assist in reducing their risk by linking traders or rice millers to seed producing associations.

Activities under this intervention are expected to provide a signal to wet season rice farmers on new and more profitable practices. We expect them to use more and better inputs and adopt modern varieties, appropriate for their conditions.

#### **Achievements to Date:**

- 1 Eleven Rice Field Demonstrations with four associations.
- 2. Four Field Days linking the associations with millers and rice / paddy traders to stimulate the commercial interest for commercial wet season varieties among farmers and small to medium sized private sector actors.

#### **Next steps:**

- 1. Rice seed production training for small rice seed producers will also involve association members. In-fact interventions Inp 11.2 and 11.3 have many complementarities. Follow-up support, if required, will be in branding and marketing of the seed to appropriate networks.
- 2 Facilitate next cycle of demonstrations between commercial entity i.e. a fertilizer company and associations.

#### Surprises, Adjustments or Problems:

Lessons learnt: The weak nature of associations causes this intervention to be closely aligned with work undertaken in Inp11.2, as many of the seed producers to be trained are also members of associations. Unfortunately the current weak nature of associations encourages seed producers to act as individuals

Intervention team members: Heng Sovathara, Tin Mola, Hoy Sokkea, Pith Lyna, Nin Charya

Int. No: Inp 11.4 AWP No: 1.2 Date: 17 January 2012

#### Name: Support local pesticide company through capacity building to technical staff

**Summary:** Nokor Thom is a Cambodian distributor of pesticides. The company has taken the lead in adding services to the products they sell but its capacity and sales volume are limited. Current official trade in pesticides is in the vicinity of 3000 tons per year and growing. MAFF estimates that an additional 9000 tons is unofficially imported through Cambodia's porous borders.

The current phase of commercialisation has increased demand for pesticides, and the market is growing at a rapid pace (annual growth >10%). National policy has shifted, partly due to the paddy production and rice export policy driving a more commercial and conventional approach to agriculture.

To ensure that Nokor Thom would optimally benefit from this opportunity, CAVAC was approached to assist in the capacity building of their extensionists. Currently Nokor Thom has three methodologies:

- Emergency response where Nokor Thom is alerted by concerned farmers or the local PDA of an emergency situation. As part of their response they train local farmers on appropriate prevention methods. Nokor Thom works with approximately 1600 households / year in this manner. They hope to reduce the requirement for this work.
- Nokor Thom organises field days to showcase the efficacy of their crop protection solutions.
   They hold approximately 65 field days each year with about 30 farmers visiting each field day. In 2011 they held 350 field demonstrations.
- 3. They provide door-to-door sales / extension activities visiting 3500 farmers annually.

The objective of the extension is to provide state of the art information to client farmers on proper crop protection methodologies, and capacity building to adequately represent this information, through any of the above methods.

#### **Achievements to Date:**

- Training support provided to Nokor Thom staff on pesticides. Professor selected was from Vietnam. An intervention with Nokor Thom allows more knowledge to be transferred directly to the farmers through their sellers.
- 2. A research study with EIC focusing on: 1) the major problems with insects; 2) herbs across CAVAC's three provinces by studying case studies; 3) considering how farmers deal with shocks; and 4) what practices are the most practical and helpful.
- 3. Pesticide position paper completed.
- 4. An MoU on retailer training with Saigon Plant Protection Company (SPC) was agreed; however this has not resulted in any activities. SPC has been subsequently unresponsive.

#### **Next steps:**

- 1. Work with PDA to provide joint training to retailers.
- 2. The current plan from GDA only considers what famers should know (e.g. very basic storage of pesticides, what products are banned and what are not, etc.). Therefore CAVAC plans to work with GDA to consider adding information on training in how to use pesticides effectively.
- 3. Continue with Nokor Thom extension strategy development (a new intervention).
- 4. Complete a baseline survey.
- 5. Look for a new partner.
- 6. Review pesticide law to see if CAVAC is adhering to it, and update position paper after new law is out.
- 7. Support call-centres so that all farmers can have a better source of information.

**Surprises**, **Adjustments or Problems**: SPC was one of our first partners however they suddenly lost interest. To date it is unclear why. Below may offer some explanation.

**Lessons learnt:** The pesticide market is a very difficult market to operate in. It's still a very controversial subject to some parts of (and with some individuals within) MAFF. Some companies prefer to operate below the radar as they do not want to risk their registration or do not want MAFF to realise that they sell unregistered products. Companies do not want to take the responsibility of publicly training retailers if the RGC through MAFF and / or the PDA has not approved the program.

Intervention team members: Sokkea and Sophoan

Int. No: Mar11.1 AWP No: 1.2 Date: 17 January 2012

#### Name: Technical Assistance on Rice and Rice Seed Production for Export Markets

**Summary:** Government paddy production and rice export policy indicates that a key success factor for domestic export millers will be the ability to purchase sufficient paddy at competitive prices.

Baitong has been identified as a key partner for this intervention. There are some fundamental issues with which Baitong struggles to successfully achieve. Although highly attractive fragrant varieties are being produced, they are not pure and this has an impact on milling efficiency and the quality of the rice being produced.

To tackle this, Baitong wants to introduce good quality seeds in its catchment to ensure millout quality. Baitong wants to increase the availability of good quality seeds and intends, with support of CAVAC, build its own seed production capacity. Baitong also aims build its capacity to do successful field demonstrations to highlight the impact of correct production methodology to communities.

**Achievements to Date:** This intervention is in the very early stages of implementation. The invention is based on the findings of the Rice Export Sector study. More broadly, key opportunities identified through included:

- Three intervention plans are developed: (1) Paddy & Rice Seed Production technical assistance +
  Baitang; (2) Export Market Development assistance + Federation of Cambodian Rice Miller
  Associations; (3) Warehouse Receipt System + Golden Rice
- Two Agribusiness Innovation Fund proposals are submitted: (1) Paddy & Rice Seed Production technical assistance + Baitang; (2) Export Market Development assistance + Federation of Cambodian Rice Miller Associations

#### **Next steps:**

- 1. Get proposals approved
- 2. Negotiate for another proposal
- 3. Implement approved proposals
- 4. Local Paddy Bank study Mobile drying machine

Surprises, Adjustments or Problems: none

**Lessons learnt:** Generating commitment is difficult. Millers are large business with a variety of commodities in which they trade. CAVAC is not always the priority as can be witnessed by the time it takes to get agribusiness innovation fund applications in.

Intervention team members: Sokkea and Sophoan

#### Intervention Update Int.

Int. No: Res11.1 AWP No: 3.2 Date: 1 January 2011

Name: Working toward a more sustainable Cambodian Journal of Agriculture (CJA)

**Summary:** The objective of this is simply to place the CJA into a strategic formation for its future sustainability.

Achievements to Date: Nothing has been achieved to date because CJA does not attract enough papers to be published. In 2011, they had five papers reviewed for publishing but two were rejected by reviewers; thus, three papers are insufficient to publish a journal.

**Next steps:** Continue trying to emphasise to the principle investigator, as CARF projects under CAVAC end, that there was a commitment to try to publish their results to the CJA.

**Surprises**, **Adjustments or Problems**: If a Cambodian author has a choice to publish, they will first try an internationally acclaimed journal. Many have been / or are successful in publishing internationally. Thus, CJA as it exists is unsustainable due to not having papers submitted.

**Lessons learnt:** Without authors being willing to submit papers very little can be done to improve CJA sustainability.

Intervention team members: Nin Charya and Sector Manager

## Int. No: Ext 11.2 AWP No: 3.2 Date: 1 January 2011

#### Name: Support to MAFF for extension material

**Summary:** The objectives of the interventions are to develop stronger linkages between permanent sources of information (CARDI and GDA) and DAE, input suppliers, and agribusinesses through the publication of science-based materials to support stronger rice productivity.

Achievements to Date: Contracts were formed with GDA and CARDI. GDA published 30,000 of their rice manual and CARDI published 10,330 Technology Package for Increasing Rice Productivity, 30,000 cluster of pre-existing documents, 2,418 banners each of soil types in Cambodia and its respective fertiliser recommendations. CARDI hosted a dissemination event to distribute their publications to all PDAs and DAOs and this event was graced by the Councillor of AusAID and the Minister of Agriculture.

**Next steps:** CAVAC will remain open to such opportunities to fast-track publication or republication of such science-based materials.

Surprises, Adjustments or Problems: The Sector Manager was unable to attend the event but was in Kampot where a returning DOA who had attended the event. He was thrilled to have these materials to provide to the various commune leaders and key model farmers in his community.

**Lessons learnt:** Remaining 'open' for opportunities is a key to CAVAC's success. CAVAC is not a 'tick off' programme but one which is opportunistic.

Intervention team members: Sector Manager alone

Int. No: Ext 11.3 AWP No: 3.2 Date: 1 January 2011

# Name: Assisting training and extension support providers with training materials, capacity building and promotion

**Summary:** Farmer knowledge is a key constraint for farmers in Cambodia. Farmers now get information through several channels: public, private and from NGO's. The quality of information and the capacity to deliver the information is still limited. Changing government strategies towards extension also required adjustment of extension materials. 1. CAVAC will investigate what NGOs or public providers are likely to deliver services and will investigate if CAVAC can support the quality. 2. CAVAC will share materials and support capacity building when requested and when this support is likely to be sustainable. 3. CAVAC can provide some start up support to private institutions.

Achievements to Date: A cost sharing agreement with a local school, ABC, to advertise and promote a rice production course has been formalised. ABC school has attracted 76 paying students for their course on rice production. Training materials and methodology developed by CAVAC have also been adopted by four NGOs and three PDAs (Kandal, Takeo, and Kampot). One of those NGOs works with disabled growers. So far ~2,380 growers were trained by the four NGOs. A farmer associated in Pursat asked CAVAC for training of trainer support and training materials.

**Next steps:** To remain open to requests by any large NGOs or schools similar to ABC, assess their effectiveness and form cost sharing agreements. We will encourage farmer associations to consider CAVAC training and resources after assessing their effectiveness as a farmer group.

**Surprises**, **Adjustments or Problems**: CAVAC did not have much confidence that rice growers would pay for a series of weekend courses. However, surprisingly it is working well.

**Lessons learnt:** As more and more NGOs see the results of our training methodology, we expect more to request assistance from CAVAC.

Intervention team members: Keo Chenda, Kry Vong Socheat

## Int. No: Ext 11.4 AWP No: 3.2 Date: 1 January 2011

Name: Training materials through other channels (feeding existing media channels with existing extension materials)

**Summary:** The final objectives of the intervention are to create awareness to the public on the scientific use of nutrients for better soil fertility and plant nutrition. This will hopefully empower growers to purchase fertilisers and apply them appropriately. Also, it will provide information to the public regarding the safety of chemical fertilisers on the environment.

CAVAC will do this by availing materials for a wide range of channels. In some cases CAVAC will financially support government departments to do so. In others cases it will avail the materials and merely undertake a monitoring function.

Achievements to Date: IRRI's Nutrient Management book was translated and numerous copies were distributed by CARDI. A comedy routine emphasising fertiliser use, Prom Man, was produced and 5,000 CAVAC-copied VCDs have been distributed, though it is estimated that over 10,000 additional copies have been sold by CD shops. A drama emphasising fertilizer use, Bang Beng was produced and 5,000 CAVAC-copied VCDs are ready for distribution in 2012. It is expected that the same number of VCDs will be copied and sold by CD shops as well. CAVAC tried to use the drama as a TV-sponsored drama but was unsuccessful in attracting a TV station.

Next steps: Consider producing a comedy or drama on pesticides

**Surprises**, **Adjustments or Problems**: CAVAC failed to have any TV station show the drama during prime time

**Lessons learnt:** As this intervention was made in the 'interim CAVAC period' there has never been any sustainability for this intervention. Agribusiness approach to media is much more in line with a market development project.

Intervention team members: Kang Sideth, Keo Chenda

Int. No: Ext 11.5 AWP No: 3.2 Date: 1 January 2011

#### **Name: Linking Event**

CAVAC hosting events between channels and provincial support providers and provincial sources of knowledge as the communication model for greater linkages among them all

**Summary:** The objectives of this particular intervention are to develop stronger linkages between permanent sources of information PDA and DAE, input suppliers, agribusinesses and model grower households through the hosting of three provincial events to support stronger rice productivity among the model grower households. While the nature of this event has not yet been formalised, we expect such an event to strengthen the linkages as our goal. Additionally, access to knowledge will improve and if linkages made from this event are successful, sustainable access to better support, markets and information will be made.

Achievements to date: A 1-day linkage event in Kampot was held in August. The linkage event successfully attracted ~500 invited model growers, local retailers and 30 input supply companies. Lessons learned were recorded for future linkage events.

**Next steps:** Plans are in place for two additional linkage events in Takeo and Kampong Thom on 10 and 24 February 2012.

**Surprises**, **Adjustments or Problems**: The first linking event had too much entertainment and not enough linking. Future events will hopefully have resolved this issue.

**Lessons learnt:** CAVAC has the difficult job of allowing the PDA full control while CAVAC must ensure that its objectives are fulfilled. The first event showed the PDA felt the event was not entirely his and CAVAC allowed the event to not entirely fulfil its objectives.

Intervention team members: Kang Sideth, Sourn Sophoan, Keo Chenda, Heng Sovathara, Ping Sodavy, Kry Vong Socheat

Int. No: Ext 11.6 AWP No: 3.2 Date: 1 January 2011

#### Name: Supporting a private call centre

**Summary:** After several talks with the private call centre company, CAVAC designed an intervention to improve the quality of agricultural content and staff capacity of the call centre. CAVAC expects that if the company can provide good information / knowledge applicable for farmers, and farmers adopt and apply successfully, there will be more calls from farmers. The company will also make more profit from this value-adding service, and they will continue to improve and update the agricultural content. This intervention will immediately impact farmers using mobile phones.

As the mobile phone market is very competitive in the country and rural communities are untapped opportunities, other mobile phone companies might copy this model or develop other value-adding services which provide knowledge and information to those communities. The call centre will become an advertising platform for agribusiness companies, which can be an incentive for the call centre to continue to provide agricultural content.

#### **Achievements to date:**

- Reviewed and accepted a proposal from Asia Master
- Designed and signed a cost-sharing contract with Asia Master
- Hired expert / consultant to work with the company to improve their agricultural content
- CAVAC provided on the job training to the call centre staff
- Supported a campaign for raising awareness of the services

**Next steps:** Continue to work with the call centre to improve their agricultural content so they can provide quality information to the callers. We are negotiating with another call centre that is also interested but has a slightly different business case than Asia Master. We also will continue to monitor the callers to ensure they remain satisfied with the information provided by the call centre.

**Surprises, Adjustments or Problems:** During a quick assessment of a sample of callers, many of the callers were not satisfied with the information they were provided. There is a need to keep training the call centre staff so that they can answer correctly.

**Lessons learnt:** Just providing information to read out is not enough. The call centre staff must be knowledgeable in answering the questions.

Intervention team members: Kang Sideth and Heng Sovathara

Int. No: Veg12.1 AWP No: 1.2 Date: 17 January 2012

Name: Improving productivity of vegetable production through improved information and availability of quality seed.

**Summary:** Cambodian vegetable farmers interested in purchasing quality seed rely on seed produced in a neighbouring country and supplied to the local market through a distributor. While seed production requires detailed agronomic knowledge, seed distribution is more a logistics issue. The support market has developed in such a way that there are not many significant exchanges between distributors and retailers, and information on new varieties and agronomic practices are not effectively shared.

To improve this, CAVAC is demonstrating on its own the efficacy of retailer training and presenting this to the resident seed companies to pick up and continue with.

#### Achievements to date:

- 1. A Value Chain Study.
- Partners screening, Intervention Plan and Impact logic developed. (There has been limited
  partner interested because Takeo and Kampot are the vegetable seed companies target
  provinces. As such, CAVAC decided to organise trainings and invited vegetable seed companies
  to join for the purpose of building networks with retailers)
- 3. Training need assessments in Takeo & Kampot conducted.
- 4. Training module developed, revised and delivered. To date, three trainings have been held in Kandal, Takeo, Kampot, with four companies attending the trainings. One last training is scheduled to be held in Kampot in February 2012.
- 5. An irrigation potential study has been conducted.

#### **Next steps:**

- 1. To partner with seed companies, considering:
  - Capacity building to seed companies in training provision
  - Retailer trainings via vegetable seed companies
  - Provision of knowledge to retailers through other means rather than training.
- 2. Since disease and pests are the main challenges in vegetable production, we will consider extending our work in "pesticides".

**Surprises**, **Adjustments or Problems**: Due to other donors working with seed companies under better terms for the seed companies than CAVAC was able to offer (buying seed from the company and giving it away to farmers), it has been difficult to find partners in this market.

Additionally, as CAVAC was not working in the main vegetable producing provinces, there was small incentive for the seed companies to invest. This has been resolved since the approval of AWP 2012.

**Lessons learnt:** Companies are hesitant to invest but are interested in the training methodology. This is made clear, working within the major vegetable producing provinces and providing this support should have a positive impact on Seed Company's willingness to invest.

Intervention team members: Sovathara, Sophea, Sophoan, and Lyna